IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

TAE-SUNG KIM et al.

Serial No.:

to be assigned

Examiner:

to be assigned

Filed:

January 30, 2004

Art Unit:

to be assigned

For:

NOVEL CONDUCTIVE ELEMENTS FOR THIN FILM TRANSISTORS USED IN

A FLAT PANEL DISPLAY

INFORMATION DISCLOSURE STATEMENT

Mail Stop: PATENT APPLICATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§1.56, 1.97, and 1.98, applicant cites, provides copies and briefly discusses the following document:

U.S. Patent References

	Patent No.	Inventor(s)	Issued Date
1.	6,255,706	Watanabe et al.	7/3/2001
2.	5,607,776	Mueller et al.	3/4/1997
3.	6,028,003	Frisa et al.	2/22/2000
4.	5,893,752	Zhang et al.	4/13/1999
5.	6,414,738	Fujikawa	7/2/2002

U.S. Patent Applications

	Publication No.	Inventor(s)	Published Date		
1.	2002/0142605	Kim	10/3/2002		
2.	2002/0085157	Tanaka et al.	7/4/2002		

Japanese Patent references

	Publication No.	Inventor(s)	Published Date
1.	07-58110	Yamaha et al.	3/3/1995
2.	07-120789	Abu et al.	12/5/1995
3.	2000-081632	Shimada et al.	3/21/2000
4.	2002-328389	Ishida et al.	11/15/2002

Discussion

- U.S. Patent No. 6255706 to Watanabe et al. discloses a thin-film transistor and method of manufacturing the same.
 - U.S. Patent No. 5607776 to Mueller et al. pertains to in-site cleaning of TI.
 - U.S. Patent No. 6028003 to Frisa pertains to a method of forming an interconnect structure.
- U.S. Patent No. 5893752 to Zhang et al. pertains to a process for forming a semiconductor device.
 - U.S. Patent No. 6414738 to Fujikawa pertains to an interconnect structure in an LCD display.
- U.S. Patent Application Publication No. 2002/142605 to Kim discloses a method of forming a metal line.
- U.S. Patent Application Publication No. 2002/0085157 to Tanaka *et al.* discloses TFT conductive elements made of Al.

Japanese Patent Publication No. 07-58110 to Yamaha et al. discloses a technique to prevent

PATENT P57002

the Al hillocks.

Japanese Patent Publication No. 7-120789 to Abu *et al.* discloses a multi-level conductive structure applicable to the scan and signal lines of the LCD device.

Japanese Patent Publication No. 2000-81632 to Shimada *et al.* discloses an inexpensive liquid crystal display device.

Japanese Patent Publication No. 2002-328389 to Ishida *et al.* discloses a novel design for a liquid crystal display device.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relative arts.

No fee is incurred by filing Information Disclosure Statement.

Respectfully submitted,

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Folio: P57002 Date: 1/30/04 I.D.: REB/ML/rfc

. INFORMATION DISCLOSURE STATEMENT PTO-1449 (PAGE 1 OF 1)

Serial N .: to be assigned

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APPLICANT: TAE-SUNG KIM et al.

FILING DATE: January 30, 2004

GROUP: to be assigned

EXAMINER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING	DATE
	6,255,706	7/01	Watanabe et al.				· · · · · · · · · · · · · · · · · · ·
	5,607,776	3/97	Mueller et al.				
	6,028,003	2/00	Frisa et al.				·
	5,893,752	4/99	Zhang et al.				
	6,414,738	7/02	Fujikawa				
	2002/0142605	10/02	Kim				
	2002/0085157	7/02	Tanaka et al.				
FOREIGN PATENT DOCUMENTS			TRANSLATION				
	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	07-58110	3/95	Japan			X	
<u></u>	07-120789	5/95	Japan			X	
	2000-081632	3/00	Japan			X	
	2002-328389	11/02	Japan			X	
	OTHER DO	CUMENTS	(Including Author, Title, Da	te, Pertinent	Pages, etc.)	
						-	
							
EXAMIN	ER:		DATE CONSIDERED:				